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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/806,149

03/23/2004

Tadamoto Tamai

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06/07/2006

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP
1250 CONNECTICUT AVENUE, NW
SUITE 700
WASHINGTON, DC 20036

EXAMINER

KEENAN, JAMES W

ART UNIT

PAPER NUMBER

3652

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/806,149	Applicant(s) TAMAI, TADAMOTO	
	Examiner James Keenan	Art Unit 3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/23/04, 7/26/05</u> | 6) <input type="checkbox"/> Other: ____ |

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 4 and 7, it is not understood how a load lock mechanism can be capable of "carrying a process object into and out of the vacuum chamber".

In claim 2, last line, "from one of them to the other via the buffer" is unclear.

In claim 5, line 7, it is not clear what is meant by "held by the ... load-lock mechanism".

In claim 6, line 1, "inner" should apparently be --internal--;

lines 4 and 6, the recitations that the arm "swings" appear to be method steps and are thus presumed to be mere functional recitations;

line 5, --one of-- should be inserted after "to";

and line 7, --the other one of-- should be inserted after "from".

In claim 8, the various recitations of a "second load-lock mechanism" lack antecedent basis (the examiner assumes applicant intended the claim to include this element);

line 12, it is not clear what is meant by "held by the ... load-lock mechanism";

line 13, it is not clear which "object" is referred to;

lines 17 and 19, the recitations that the arm "swings" appear to be method steps;

line 18, --one of-- should be inserted after "to" (second occurrence);

and line 20, --the other one of-- should be inserted after "from".

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 8, as best understood, is rejected under 35 U.S.C. 102(b) as being anticipated by JP 10-125764 (hereinafter JP), cited by applicant.

JP shows a vacuum processing system comprising vacuum chamber 45, first and second load lock mechanisms 93, 95, holding mechanism 55 in the vacuum chamber for moving an object between a process position 131 or 133 (figs 5D-E) and a load position 57, and an internal arm "capable of", as broadly claimed, exchanging an object at the load position with another object, wherein the internal arm includes first and second arms 49, 51 which are at least "capable of" operating in the manner set forth to move objects between the load position and the first and second load locks.

5. Claims 1-4 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Dickinson (US 6,852,644).

Dickinson shows a vacuum processing system comprising vacuum chamber 64, first and second load locks 70, 76, external arm 90 capable of carrying the process object into at least the first load lock chamber (it may be "capable of" carrying the object into the second load lock chamber as well; however, as currently written, the claim is considered to only require the arm to be capable of carrying the object into either one or the other of the load locks, but not necessarily both), and first and second robot arms 88, 92 each of which is capable of transferring the process object between a stock site 84 and the external arm, and between the stock site and the corresponding first or second load lock.

Re claims 2 and 7, aligner 94 is also considered a buffer, absent any further structural limitations.

Re claims 3 and 4, Dickinson clearly discloses controls capable of operating the arms in the manner set forth. Note that functional recitations in an apparatus claim need not be explicitly disclosed by a reference in order to be anticipated but must merely be capable of being performed by that reference.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson in view of JP.

Dickinson shows only a single robot arm 82 in the vacuum chamber rather than a holding mechanism and an internal arm comprised of first and second arms.

As noted above, JP discloses a holding mechanism and an internal arm comprised of first and second arms.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the apparatus of Dickinson by replacing the single robot arm in the vacuum chamber thereof with a holding mechanism and an internal arm comprised of first and second arms, as shown by JP, as this would increase efficiency and productivity.

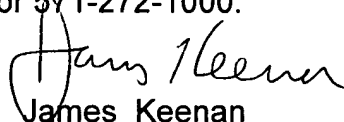
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Keenan whose telephone number is 571-272-6925. The examiner can normally be reached on (schedule varies).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eillen Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3652

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


James Keenan
Primary Examiner
Art Unit 3652

jwk
6/02/06